



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,251	09/15/2003	Masuyuki Ohta	16869P-019720US	2862
20350	7590	04/30/2004	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			QI, ZHI QIANG	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/663,251

Applicant(s)

OHTA ET AL.

Examiner

Mike Qi

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-21 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/760,385.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,233,034 (Lee et al).

Claim 1, Lee discloses (col.10, line 4 – col.11, line 53; Figs.5B, 6) that a liquid crystal display device comprising:

- first substrate (40);
- second substrate (52) facing the first substrate (40);
- liquid crystal layer (57) interposed between the first and second substrate;
- at least one pixel area being defined by a plurality of gate lines (41) and a plurality of drain lines (47) arranged in a matrix over the first substrate, wherein the plurality of gate lines (41) are extending in a first (X) direction, and the plurality of drain lines (47) are extending in a second (Y) direction;
- first electrode (pixel electrode 46) assigned to the pixel area, the first electrode (pixel electrode 46) over the first substrate (40);

Art Unit: 2871

- second electrode (counter electrode 43) assigned to the pixel area and facing the first electrode, the second electrode (counter electrode 43) provided over the first substrate (40) and being transparent (ITO), the second electrode (counter electrode 43) having a solid portion (such as body 43a and strips 43b) and a hollow portion (such as a portion between strips 43b), and the hollow portion being superposed to at least a portion of the first electrode (such as a portion of pixel electrode 46b), as this application indicated in the specification (paragraph 0039), the term "superposed" refers 'overlapping';
- a gate insulating layer (44) provided between the first (pixel) and second (counter) electrodes.

Claim 2, Lee discloses (col.10, line 4 – col.11, line 53; Figs.5B, 6) that a liquid crystal display device in which the hollow portion of the second (counter) electrode has a width extending in the first (X) direction and a length extending in the second (Y) direction, and the length being substantially greater than the width as shown in Fig.5B.

Allowable Subject Matter

3. Claims 17-21 are allowed.
4. Claims 3-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record neither discloses nor teach a liquid crystal display device comprising various elements as claimed, more specifically, as the following:

one of the branch portions of the pixel electrode is overlapping the counter electrode and another of the branch portions of the pixel electrode is overlapping to the hole of the counter electrode as shown in Fig.5B [claim 17];

one or more of the plurality of branch portions being superposed to the solid portion of the second electrode (counter electrode), and one or more of the plurality of branch portions being superposed to the hollow portion of the second electrode (counter electrode) as shown in Fig.5B [claim 3];

The closed reference US 6,233,034 (Lee et al) discloses a structure of an IPS liquid crystal display device in which the pixel electrodes and the counter electrodes having branch portions (strips) and connection portions (body), but the branches of the pixel electrodes only overlapping the hollow portions (between the strips of the counter electrodes), and the prior art of record do not disclose such superposed structure as claimed in the claims 3 and 17 and as shown in Fig.5B.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (571) 272-2299.

The examiner can normally be reached on M-T 8:00 am-5:00 pm.

Art Unit: 2871

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Qi
April 17, 2004

A handwritten signature in black ink, consisting of a stylized vertical stroke followed by a horizontal line extending to the right.

**KENNETH PARKER
PRIMARY EXAMINER**